WHAT IS CLAIMED IS:

1. A pickup device for a dielectric recording / reproducing apparatus using a dielectric material as a recording medium, comprising:

a first electrode for applying an electric field to the dielectric material;

an electrode holding member for holding said first electrode;

an arm portion equipped with said electrode holding member; and

a rotating mechanism for rotating said arm portion.

2. The pickup device according to claim 1, wherein said electrode holding member has a gimbal structure.

3. The pickup device according to claim 1, wherein said electrode holding member contains a conductive member and is mounted on one end of said arm portion via an insulating member.

4. The pickup device according to claim 1, wherein said electrode holding member and said first electrode are formed in one piece.

5. The pickup device according to claim 3, comprising a second electrode for returning a high-frequency electric field applied from said first electrode to the dielectric material of the recording medium, the second electrode being placed on a surface of the insulating

member facing to the recording medium.

6. The pickup device according to claim 1, wherein said electrode holding member contains an insulating member.

7. The pickup device according to claim 6, comprising a second electrode for returning a high-frequency electric field applied from said first electrode to the dielectric material of the recording medium, the second electrode being placed around said electrode holding member.

8. The pickup device according to claim 7, wherein one end of said arm portion is used as said second electrode.

9. The pickup device according to claim 6, wherein a plurality of said first electrodes are disposed on said electrode holding member.

10. The pickup device according to claim 1, comprising:

an inductor which forms a resonance circuit with a capacitance of the dielectric material of the recording medium just under said first electrode; and

an oscillator which oscillates at a resonance frequency of the resonance circuit,

wherein the inductor and the oscillator are placed in the vicinity of said first electrode.

11. The pickup device according to claim 1 further comprising an oscillator, wherein the first electrode is placed at one end of the arm portion, the oscillator is placed at another end of the arm portion, and a rotating shaft of said rotating mechanism is located between the first electrode and the oscillator.

12. The pickup device according to claim 1 further comprising a weight, wherein the first electrode is placed at one end of the arm portion, the weight is placed at another end of the arm portion, and a rotating shaft of said rotating mechanism is located between the first electrode and the weight.

13. The pickup device according to claim 1, wherein said rotation mechanism is a motor of rotational type.

14. The pickup device according to claim 1, wherein said rotation mechanism is a motor of linear movement type.

15. The pickup device according to claim 1, wherein a tip portion of said first electrode does not project from a surface of said electric holding member facing to the recording medium.

16. The pickup device according to claim 1, wherein said electric holding member has a sloping surface sloping with respect to a surface parallel to a surface of the recording medium, the sloping surface is located at a portion facing a moving direction of the

recording medium.

17. The pickup device according to claim 1, comprising a device for reproducing information recorded in the dielectric material of the recording medium on the basis of a scanning nonlinear dielectric microscopy method.